

REMARKS

Reconsideration of the application is respectfully requested for the following reasons:

1. Amendments to the Claims

Claim 1 has been amended to recite that the socket codes include file transfer codes. This is supported by illustration of the SGetFileName, SSendFile, and SFileArrival codes in Fig. 2.

In addition, claim 1 now recites that the data transfer control codes are related to the application layer software, as supported for example by description of the SGetData code in lines 6-14 on page 4 of the original specification, which enable specific data strings to be requested and transferred in an application specific format (Structured Query Language in the illustrated example).

Finally, the application specific data transfer codes, as set forth on page 4 of the original specification, are now recited specifically in claims 10 and 11.

2. Rejection of Claims 1 and 2 Under 35 USC §102(b) in view of U.S. Patent No. 5,537,417 (Sharma)

This rejection is respectfully traversed on the grounds that the Sharma patent fails to disclose inclusion, in a TCP socket layer, of control codes for file transfer, including control codes for that enable an application to directly call for transfer of a particular file and verify the transfer at the socket level, thereby simplifying file transfer and improving data integrity. In addition, the Sharma patent fails to disclose or suggest inclusion, in the TCP socket layer, of application-specific data transfer control codes (*i.e.*, “data transfer codes related to the application layer software”) such as the SQL queries described on page 4 of the original specification, and now recited more specifically in new claims 10 and 11..

As illustrated in Fig. 3 of the present application, the invention permits a client end application software 10B to simply identify a file in the File Database of the server's application software 20B, and carryout the necessary file transfer and verification steps at the socket level of both the server and client end. The application also permits the application layer program to structure a send data request to include the length and parameters of an instruction string corresponding to a specific application layer program, such as a program that executes the Structure Query Language.

In contrast, the Sharma patent is directed to a method of selecting different protocols by establishing a socket that contains information on each of the protocols. This is accomplished by *"moving the decision on which protocol to use to the time that the connection is actually made between nodes in the network"* (col. 2, lines 38-55 of Sharma). Sharma does not disclose any specific modifications to a particular socket for a specified protocol, but rather modifies the method and timing by which the socket is created, so as to create so-called "multi-protocol" sockets (see, col. 9, lines 54 *et seq.* of the Sharma patent. The claimed invention does not require such dynamic socket creation. Instead, it provides for elements of specific transfer protocols to be included in an existing socket that supplements the conventional Winsock.

In a sense, the claimed invention may be thought of as an application-specific socket plug-in, that permits applications using common file or data formats to share a communications socket, and carry out certain application-level functions at the TCP socket level. It involves use of socket type control codes to implement functions that might normally be carried out by application level software modules, simplifying certain types of application level programs and facilitating data and file transfers. The dynamic sockets generated by Sharma, on the other hand, are not application specific. Sharma concerns the establishment of the sockets, and does not include any teachings concerning modification of the sockets to implement application-specific data transfers (by including, for example, SQL parameters in the query string), or socket-assisted file transfers.

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Because the Sharma patent fails to disclose a socket with file transfer calls and application-specific data transfer calls or codes, it is respectfully submitted that the rejection of claims 1 and 2 under 35 USC §102(b) based on the Sharma patent is improper and withdrawal of the rejection is respectfully requested.

3. Rejection of Claim 3 Under 35 USC §103(a) in view of U.S. Patent Nos. 5,537,417 (Sharma) and “Unit Network Programming” (Stevens)

This rejection is respectfully traversed on the grounds that the Stevens publication, like the Sharma patent, fails to disclose inclusion, in a TCP socket layer, of control codes for file transfer, including control codes for that enable an application to directly call for transfer of a particular file and verify the transfer at the socket level, and application-specific data transfer control codes.

While the Stevens publication discloses control codes corresponding to SConnect, SListen, and other basic TCP socket functions, the undersigned has reviewed the cited Sections 4.2-4.9 and 11.2-11.9, and cannot find any functions corresponding to the claimed data and file transfer functions. It may that such functions are accounted for by other protocols, but it is respectfully submitted that neither the Sharma patent nor the Stevens publication, whether considered individually or in any reasonable combination, suggests included such functions in a TCP socket. As a result, withdrawal of the rejection of claim 3 under 35 USC §103(a) is respectfully requested.

4. Rejection of Claim 4 Under 35 USC §103(a) in view of U.S. Patent Nos. 5,537,417 (Sharma) and 6,449,601 (Friedland)

This rejection is respectfully traversed on the grounds that the Friedland patent, like the Sharma patent, fails to disclose a TCP socket layer having control codes for file transfer, including control codes for that enable an application to directly call for transfer of a particular file and verify the transfer at the socket level, and application-specific data transfer control codes.

While it is of course known to include encryption/decryption capabilities in a socket tool (e.g., the Secure Socket Layer (SSL) protocol), and such encryption/decryption is necessary in an e-commerce/auction environment such as the one disclosed in the Friedland patent, neither the Friedland patent nor the Sharma patent suggests integration of integration/decryption functions with file and data transfer functions in a single socket layer tool set, as claimed. In fact, the Friedland patent is not directed to, and does not disclose, any details of the TCP socket layer used by the auction program described therein. As a result, withdrawal of the rejection of claim 4 under 35 USC §103(a) is respectfully requested.

5. Rejection of Claim 5 Under 35 USC §103(a) in view of U.S. Patent Nos. 5,537,417 (Sharma) and 6,504,926 (Edelson)

This rejection is respectfully traversed on the grounds that the Edelson patent, like the Sharma patent, fails to disclose inclusion, in a TCP socket layer, of control codes for file transfer, including control codes for that enable an application to directly call for transfer of a particular file and verify the transfer at the socket level, and application-specific data transfer control codes. Furthermore, the Edelson does not disclose or suggest inclusion of compression/decompression control codes in the socket layer, as specifically recited in claim 4.

The Edelson patent is directed to an Internet telephony application that includes audio data compression/decompression at the application level. No provision is made for including compression/decompression calls in the TCP socket layer. Instead, the compressed/decompressed data is treated, in the conventional TCP socket layer 31 used by Edelson, as ordinary data to be transferred. Whereas the claimed invention provides compression/decompression functions that can be used by an program with the appropriate function calls, Edelson's compression/decompression is application specific and does not include any socket layer codes corresponding to the claimed compression and decompression codes. As a result, withdrawal of the rejection of claim 5 under 35 USC §103(a) is respectfully requested.

6. Rejection of Claims 6-9 Under 35 USC §103(a) in view of U.S. Patent No. 5,537,417 (Sharma) and U.S. Patent Publication No. 2002/0112237 (Kelts)

This rejection is respectfully traversed on the grounds that the Kelts publication, like the Sharma patent, fails to disclose inclusion, in a TCP socket layer, of control codes for file transfer, including control codes for that enable an application to directly call for transfer of a particular file and verify the transfer at the socket level, and application-specific data transfer control codes. Instead, as explained in col. 10, paragraph [106]: "*Application databases 506 are preferably configured to communicate with map servers 504 via TCP/IP in accordance with known techniques.*"

2 While the application databases disclosed by Kelts may be "SQL databases" (col. 10, paragraph [106]), there is no suggestion in Kelts of modifying the socket to include an SQL specific data request, with SQL parameters included in the request, or to further modify by the socket by adding direct file transfer codes. As a result, it is respectfully submitted that neither the Sharma patent nor the Kelt publication, whether considered individually or in any reasonable combination, could have suggested the claimed invention, and withdrawal of the rejection of claims 6-9 under 35 USC §103(a) is requested.

Having thus overcome each of the rejections made in the Official Action, withdrawal of the rejections and expedited passage of the application to issue is requested.

Respectfully submitted,

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